

Postgraduate Course Video Session

## Postgraduate Course Video Session (III-PCV)

### Complex BVR Video Session - Challenges and technical solutions -

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Sun. Jul 9, 2017 3:10 PM - 5:00 PM ROOM 3 (Exhibition and Event Hall Room 3)

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3:10 PM - 5:00 PM

### [III-PCV-07]Half-turned truncal switch operation for TGA and TGA type DORV with left ventricular outflow obstruction

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Keywords:Left ventricular outflow obstruction, Half-turned truncal switch operation

We developed an innovative surgical technique, half-turned truncal switch operation (HTTSO), for TGA with left ventricular outflow obstruction to ensure straight and non-obstructive aortic and pulmonary ventricular outflow tracts using an autologous half-turned “truncal block” which involves both semilunar valves (J Thorac Cardiovasc Surg 2003;125:966-8).**Case:** 12 month, female, 7800g. The aorta was transected above the sino-tubular junction. Pulmonary trunk also divided just before its bifurcation. Both coronary arterial buttons were resected. The truncal block involving both semilunar valves was separated from the ventricular outflow. Resected truncal block was half-turned. Posteriorly translocated aortic annulus was anastomosed to the left ventricular outflow orifice. The VSD was closed with an ePTFE patch. Both coronary buttons were anastomosed to the corresponding defects of the aortic wall. After the pulmonary bifurcation was translocated anteriorly, the aorta was reconstructed by end-to-end anastomosis. Pulmonary trunk was anastomosed to the RV outflow. The distal stump of the pulmonary trunk was anastomosed to the pulmonary bifurcation.**Discussion:** HTTSO has various advantages such as wide and straight left ventricular outflow tract and wide right ventricular outflow tract, which has growth potential. TGA or TGA type DORV with antero-posterior great arteries and mild to moderate PS is optimum indication of HTTSO. HTTSO can be also indicated to patients with small RV, remote VSD, restrictive VSD, and bicuspid pulmonary valve.